

(Draft) Work Plan for the DOE TEC Rail Topic Group Radiation Monitoring Sub-Group

Status: Active

TEC Stakeholder Leads: Marty Vyenielo (PA/NE Task Force), Cort Richardson (CSG-NE)

DOE Lead: Alex Thrower (OCRWM)

Contractor Support: John Smegal (Legin)

Start Date: October 4, 2007

Purpose: The Transportation External Coordinating (TEC) Working Group's Rail Topic Group (RTG) provides stakeholder perspectives and feedback to the Office of National Transportation (ONT) in the Department of Energy's (DOE) Office of Civilian Radioactive Waste Management (OCRWM) and Environmental Management (EM) regarding topics of common interest concerning operating practices, logistical constraints, and other rail-related issues affecting the development and deployment of a safe, secure, and efficient system for transporting spent fuel (SNF) and high-level radioactive waste (HLW) to a national repository by rail, while meriting public confidence.

Approach: The Rail Topic Group will convene conference calls every two months and will meet at TEC meetings. Smaller work groups will meet (including via teleconference) on a monthly basis or as necessary, reporting back to the full RTG on the bimonthly calls and at meetings. OCRWM and RTG stakeholder members will work collaboratively to develop agendas for RTG meetings and bimonthly calls.

Radiation Monitoring Subgroup: Identify, investigate, compile findings and develop recommendations regarding radiation monitoring issues to be considered when designing a national transportation system for shipping SNF and HLW to a national repository.

Specific objectives and topics to be addressed by the Radiation Monitoring Subgroup include:

1. Review how radiation monitoring standards and procedures are addressed in relevant DOE documents (i.e. OCRWM's Transportation System Concept of Operations, National Transportation Plan, etc.) along with benchmarking/lesson's learned papers.
2. Identify the technical needs and procedures necessary to support a monitoring program that satisfies the requirements of states, tribes and other jurisdictions.
3. Identify resource needs (funding, equipment, training, personnel, etc.) for conducting radiation monitoring by states, tribes and other jurisdictions. Consider what assistance to States and other jurisdictions is required to conduct radiation monitoring, interpret results, transfer findings to necessary state and federal authorities and maintain information collection systems.
4. Survey the types of radiation monitoring devices currently employed by the federal government, industry, states and other jurisdictions for shipment inspections and investigate other available equipment and new technologies under development and determine what their additional capabilities and features may be. Collected data should include the source, transmission mode, collection method, scope, timeliness, quality,

reliability, and utility of radiation monitoring technologies and capabilities available to State/Tribal/local officials.

5. Contact and, where appropriate, join in parallel efforts underway at CVSA, DHS and other organizations to assess radiation monitoring equipment capabilities and inspection procedures. Subgroup reps attend March 29 CVSA ad hoc RAM/Security/ITS meeting in Denver, CO.
6. Consider appropriate opportunities for streamlining the number of radiation monitoring inspections conducted for a given shipment and/or campaign by determining: 1) if different corridor jurisdictions would accept others radiation monitoring findings, 2) whether it's feasible and desirable for FRA inspectors to be trained to conduct radiation monitoring and report results, and 3) whether DOE should deploy a qualified control technician as part of the escort personnel assigned to every shipment to be responsible for conducting radiation monitoring on an ongoing basis, as well as performing reporting and notification functions.
7. Develop policy recommendations for specific circumstances such as addressing incidence of high or false readings, and determining necessary recovery steps.
8. Consider implications of accidents for scenarios involving reliance on installed or remote monitoring devices and using escort personnel to monitor shipments.
9. Identify worker exposure, dosimetry and training issues: consider NAS study and other sources, railroad management and union perspectives, DOE and state agency recommendations, etc.
10. Inform Rail & Routing Topic Group planning particularly for input to inspections and tracking discussions; support TG efforts.

Members: Kevin Blackwell (DOT/FRA), Ralph Best (DOE-BSC), Patrick Brady (BNSF RR), Matt Dennis (DOE-SNL), Pat Edwards (PA/NE Task Force), Ray English (DOE-NNPP), Bob Fronczak (AAR), Aubrey Godwin (AZ/WIEB), Ralph Hail (NS RR), Vernon Jensen (Winnebago Tribe of NE), Sean Kice (SSEB), Marsha Keister (DOE-INL), Mel Massaro (DOT/FRA), Christina Nelson (NCSL), Doug Osborn (DOE-SNL), Scott Palmer (BLET), Cort Richardson (CSG-NE), Tim Runyon (IL/CSG-MW), Steve Schmid (DOE-BSC), Larry Stern (CVSA), Alex Thrower (DOE-OCRWM), Marty Vyeniello (PA/NE Task Force), Jim Williams (WIEB), Sarah Wochos (CSG-MW), Ed Wilds (CT/NE Task Force)

Products:

- Report for RTG that addresses radiation monitoring issues investigated by the subgroup and offers recommendations for conducting radiation surveys during shipments of high-level waste and spent nuclear fuel.

Schedule/Status as of 2/4/08:

Topic Group Product	Due Date	Lead	Comments/ Status
Conduct subgroup conference calls	bi-monthly	Marty/Cort	Ongoing, John assists
Distribute call notes and incorporate comments	bi-monthly	John/Cort	Ongoing, John assists
Periodically report progress to RTG	bi-monthly	Marty/Cort	Ongoing, John assists
Develop and distribute work plan including	2/4	Cort	Cort to edit John re-

tasks, key objectives and topics			distribute after TEC.
Draft state (and tribal?) survey instrument to collect data on needs and requirements	2/15	Cort	Distribute draft to subgroup for comment
Process comments; distribute survey to SRGs	2/27	Cort	SRGs send it to states
SRG's collect data and return state (and other?) responses to subgroup leads	3/21	Regional staff	Leads tabulate findings
Attend CVSA committee meeting in Denver	3/29	Cort,???	Report to subgroup
Leads reports findings to group	4/4	Cort/Marty	John assists
Review DOE documents for discussion of radiation monitoring standards and practices	4/4	???????	Assignees report to subgroup
Hold next conference call	Mid-March	Marty/Cort	John assists
Identify rail worker exposure, dosimetry and training issues (for state inspectors too?)	TBD	RR/BLET/FRA/state folks?	Form sub-committee; develop recommendations
Investigate role for DOE escort personnel	TBD	DOE site members?	Develop recommendations
Investigate feasibility of using FRA inspectors to conduct radiation monitoring	TBD	FRA folks	
Investigate new monitoring technologies and capabilities; identify and contact government entities and others conducting assessments	TBD	???????	Report findings
Investigate opportunities for streamlining inspections process while meeting needs of states (and other jurisdictions?); consider implications of accident scenarios on ideas	TBD	State folks	Develop recommendations
Develop policy recommendations for dealing with other issues such as high and false readings	TBD	State folks	
Develop progress report for next TEC	TBD	Marty/Cort	John assists

Last Updated By: Cort Richardson (CSG-NE) 2/4/08